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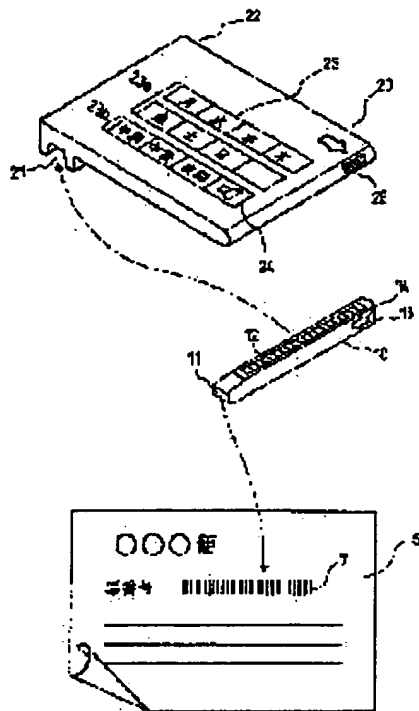
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(54) INFORMATION TRANSMISSION SYSTEM USING TELEPHONE LINE AND  
ITS TERMINAL



(57)Abstract:

PURPOSE: To improve service and to reduce the cost by providing the system with which information received by an operator can be directly sent to the terminal installed at a center while using a simple communication terminal to be used easily for anyone.

CONSTITUTION: This system is provided with a card type user terminal 20, driver terminal 10 for setting information such as a baggage handling number from a driver to this terminal 20, and center terminal for receiving data from the user terminal 20 through a telephone line. The user terminal 20 is provided with a user interface 23 for a day of the week and a delivery

so as to designate the date and time of redelivery and it is enough for a user only to operate the interface 23. When a telephone call is made to a delivery center and a speaker button 24 is pushed, the information set by the driver terminal 10 and the information set by the user are turned to series of tone signals and transmitted to the center terminal.

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the simple information transfer system which can process the information transmitted using the telephone line by computer etc. as it is about a simple information transfer system.

[0002]

[Description of the Prior Art] In distribution services, such as delivery and mail, although the driver visited a user's house etc., when it is absence, an absent communication vote is placed and it once pulls up, and there is a system re-delivered with directions of a user. In this system, a user telephones the number of the delivery center specified as the absent communication vote, and tells the slip number indicated by the operator of a delivery center at a user's address and the absent communication vote, the time which wishes re-delivery. The operator of a delivery center creates the data for re-delivery directed to a driver called a re-delivery inquiry reception card based on such heard information.

[0003] Although the time zone when the operator is working can connect the time of choice of re-delivery by the above approaches, since there is no operator, neither night nor a holiday can be connected. Although it is also possible to cope with it using functions, such as an answering machine, it is uncertainty that the check of the transmitted time of choice cannot be performed etc., and is seldom used.

[0004]

[Problem(s) to be Solved by the Invention] The loading which turns to re-delivery is 100 numbers per day in one delivery centers, such as the center of Tokyo, and when many, it may exceed 1000 pieces. Therefore, it is necessary to also station many operators of dedication who receive the telephone of re-delivery in a delivery center, and costs start. Furthermore, an operator's operation repeats the above responses, performs them and

also has the problem that it is not easy serious to secure a required staff. Moreover, there are also many users who can connect only the night in which an operator is not, and a holiday to a delivery center, and they also have the problem that the service which can use the system of re-delivery is not prudent.

[0005] Then, in this invention, in case the time which wishes a redistribution is connected to a delivery center, an operator is not needed, but it aims at offering the system which can be served for 24 hours. Furthermore, even if the user who connects does not receive directions of an operator, it is also making into the object to offer the system which can connect very easily the time expected the information which identifies the loading delivered by the it. Especially, it gets used to receive the existence of the information about a computer, and a system, an understanding is hardly needed, but it aims at offering the system which can be used easily [ anyone ] regardless of age or sex. Moreover, the transmitted information can be checked easily and it is also making into the object of this invention to consider as the system which can also perform subsequent processing.

[0006]

[Means for Solving the Problem] It enables it to connect the time which passes a user the terminal of dedication and expects it of him simply in this invention paying attention to a delivery member visiting a user in distribution service. That is, the system of this invention constitutes the system using the driver terminal with which a delivery member performs input/output operation, the user terminal into which the 1st information equipped with the identifiable code is inputted in the loading to which it was collected and delivered by the delivery member and delivery was entrusted with the driver terminal, and the pin center, large terminal which receives the data from a driver terminal and a user terminal, respectively. And the user terminal is equipped with the step which sets up the 2nd information equipped with the identifiable code for the time a user expects re-delivery of loading, the step which will change said 1st and 2nd information into a series of tone signals if there are output directions of a user, and the step which outputs this tone signal further. Moreover, the pin-center, large terminal is equipped with the 1st step which receives the tone signal from said user terminal through the telephone line, the 2nd step which changes into voice the 2nd information transmitted by the tone signal, and is outputted through the telephone line, and the 3rd step which combines the data from said driver terminal, and the data from a user terminal based on the 1st information transmitted by the tone signal, and creates the 3rd information.

[0007] In the information transfer system of such this invention, a user does not need to

recognize the information which identifies loading that what is necessary is just to specify the time he expects re-delivery on a user terminal. Moreover, since the 1st information including the information which identifies loading will be shared with a driver terminal, the 3rd information, such as re-delivery directions of the loading which set the data from a user terminal and turned to re-delivery, can be easily created by transmitting the data of a driver terminal to a pin center, large terminal.

[0008] A user terminal For example, the interface for driver terminals which receives the 1st information from a driver terminal, The user interface to which a user can set the 2nd information, and the memory which memorizes the 1st and 2nd information, It is [ that what is necessary is just to prepare the tone signal transformation section which changes the 1st and 2nd information into a tone signal, the dispatch section which sends a tone signal, and the control section which controls these further ] realizable as a terminal with which the shape of a card was miniaturized dramatically. Moreover, a user interface is also good to prepare the part which specifies the time which wishes re-delivery by the day of the week, and the part which specifies the time by the time zone. In such a user terminal, a user becomes the actuation directed by the push button of the dedication which showed the day of the week and the time zone etc., and can use for anyone. Moreover, since the limited information can be directed with the interface only for the information, there is dramatically little possibility that a mistake will occur in a user and pin center, large side. Therefore, the reliable information transfer system which actuation is easy and is mistaken and which is not can be built.

[0009] And the information containing the code which identifies the time which wishes the code and re-delivery which identify the loading which is needed by the delivery center side is transmitted through the telephone line only by directing transmission in a user terminal as a series of tone signals which can be computer-processed as it is from a user terminal. Therefore, in a pin center, large terminal, the 1st and 2nd information can be processed as it is, and it also becomes possible to create the 3rd information required for re-delivery based on the data from a driver terminal and the data from a user terminal. For this reason, the operation which receives communication of re-delivery is saved labor, and relief of an operator's effort and reduction of costs can be aimed at. Moreover, it also becomes possible to receive communication of a redistribution in organization for 24 hours.

[0010] Furthermore, since the coded data are transmitted from a user terminal, this is analyzed by the pin center, large terminal side, and the check by the side of a user can also be automatically performed by answering with voice.

[0011] Moreover, a user's business may be unable to be transmitted in the range of the

data set as the user terminal. Since the information by a user's voice can be recorded by preparing the step which memorizes the voice of the user transmitted through the telephone line after predetermined time amount progress following the 2nd step when such, a flexible response is attained.

[0012] Moreover, when having not accepted the tone signal equipped with the 1st information included in data from the driver terminal after receiving the data from a driver terminal before [ after predetermined period progress ] from a user terminal using the above-mentioned system, it is also possible to offer service which sends the predetermined message which demands directions of re-delivery from a user through the telephone line. By this, improvement in service and laborsaving of operation can be attained further.

[0013]

[Example] The example which applied the information transfer system of this invention to below to the parcel delivery service is explained. The example of the system of the re-delivery in a parcel delivery service is shown in drawing 1 . Moreover, the example of the driver terminal used for this re-delivery system at drawing 2 and a visitor terminal (user terminal) is shown. The outline of the re-delivery system of this example is as follows. First, a delivery member (driver) puts loading on a delivery van 1, holding the driver terminal 10 and two or more user terminals 20, and patrols the receiver's addresses 2, such as a user's domicile specified as each loading. The slip number by which the driver was given to the cut-form 6 of loading using the driver terminal 10 as a user is absence is read for a receiver's address 2, and this is set to a user terminal 20. And the user terminal 20 to which data were set is put on a receiver's address 2, and it turns to the following patrol place. At this time, the advice which indicated the operation of a user terminal 20 etc. may be attached. A driver sends delivery data, such as a slip number recorded on the driver terminal 10, to the pin center,large terminal 30 installed in the delivery center 3 on radio etc. This delivery data may be inputted into the pin center,large terminal 30 when a driver returns to a delivery center 3.

[0014] The user who returned to the house etc. is brought home, although the advice vote which looked at the user terminal 20 or was placed simultaneously was seen and loading was delivered during absence, and he gets to know that the time wishing re-delivery needs to be specified. And the time which expects re-delivery of a user terminal 20 is set, a delivery center 3 is telephoned, and a tone signal is sent from a user terminal 20 towards an earphone 5. The pin center,large terminal 30 of a delivery center 3 receives a tone signal, recognizes the time of choice of re-delivery, creates the data for re-delivery automatically, and directs them to a driver. A driver carries out re-delivery

to the time for which a user wishes according to this data.

[0015] The re-delivery system of further this example is explained, explaining the function of a driver terminal, next each terminal. The outline of a driver terminal is shown in drawing 2 . Moreover, the flow of processing on the re-delivery system performed to drawing 3 at a driver terminal is shown, and the system configuration of an outline is further shown in drawing 7 . The driver terminal 10 of this example is a pencil mold, and the whole could contain it to the chest pocket of a driver, and has come it. That head is a bar code reader 11, and can read rightly the information which recognizes the object of re-deliveries, such as an identification number of others which were given to the slip number 7 by which the cut-form 6 was bar-code-ized with this bar code reader 11, or loading. The interface 12 for drivers is formed in the front face of the driver terminal 10, the identification number of a driver is inputted from this interface 12, or the write-in condition of the data to a user terminal 20, the check of the soundness of the user terminal itself, etc. have come be made to the check of the reading condition of data, and a pan.

[0016] The interface 13 which transmits data to a user terminal 20 is formed in the side face of the driver terminal 10, and situation check of a user terminal 20 and reset of memory can be performed now using this interface 13. There is an optical electrical transmission system which the system of a non-contact mold is adopted as an interface 13 for user terminals, for example, is constituted from this example by a light emitting diode and the photo transistor. Of course, media, such as wireless, may be used. Therefore, if the driver terminal 10 is set in the fitting section 21 of a user terminal 20, an interface 13 will face the interface 22 for driver terminals of a user terminal 20, and data will be transmitted and received. Moreover, in the driver terminal 10 of this example, if this interface 13 for user terminals also has the function of the interface 14 for pin center, large terminals and sets the driver terminal 10 in the predetermined part of the pin center, large terminal 30, the information on the driver terminal 10 will be transmitted to the pin center, large terminal 30. The driver terminal 10 is equipped also with the memory 15 which stores further the data inputted from the bar code reader 11 or the interface 13 for user terminals, and the control section 18 which controls these.

[0017] The outline of the processing in a driver terminal is explained based on the flow chart of drawing 3 . In step 51, a driver reads handling-of-freight data, such as a slip number of loading, using the bar code reader 11 of the driver terminal 10 as a destination is absence. Next, these data are set to a user terminal 20 in step 52. The data to set may add the data for identifying and managing re-delivered loading, such as an identification number of a driver, and delivery time, to the above-mentioned



handling-of-freight data. This re-delivered loading is identified and the data (delivery data) to manage are stored also in the memory 15 of the driver terminal 10 in step 53. Moreover, it is also possible to prepare the user-terminal identification number original with a user terminal for the memory 25 in a user terminal 20, to read this identification number in the interface 13 for user terminals in step 52, and to accumulate as one of the delivery data.

[0018] Next, it checks whether the delivery data stored in memory 15 in step 54 are outputted to a pin center, large terminal, and when not outputting, it returns to step 51 and the following user terminal is set up. When outputting, in step 55, delivery data are outputted to the pin center, large terminal 30. Whenever the approach of outputting is various and sets each user terminal, it may send delivery data to the pin center, large terminal 30 on radio etc., it may connect the driver terminal 10 and the pin center, large terminal 30 soon through the telephone line per time amount or Japanese, and may transmit delivery data.

[0019] It is also possible to add a user's telephone number to the delivery data set up using a driver terminal, and it can also manage with a user's telephone number instead of a slip number. The input of the telephone number may use the ten key of a driver interface, or can also input it using the bar code table corresponding to a figure. If a user's telephone number is added to delivery data, it is convenient in case service to a user, such as urging assignment of re-delivery time, is offered automatically. Moreover, even if the configuration of a driver terminal is not limited to such a pencil mold and is a general-purpose terminal of the personal computer of a car loading mold, it is easy to be natural [ a configuration ]. Furthermore, such a terminal may perform the above-mentioned entry of data using a voice recognition system, pen input system, etc.

[0020] The outline of the user terminal 20 of this example is shown in user-terminal drawing 2 . Moreover, an example of the processing in a user terminal is shown in drawing 4 using a flow chart, and an example of the system configuration of a user terminal is further shown in drawing 8 . The whole is a thin card mold and the user terminal 20 of this example has become the configuration which can be inserted in a mailbox etc. The part 21 which connects the driver terminal 10 and can transmit data is formed in one rear-face side of a user terminal 20, and the interface 22 for driver terminals is installed in this part.

[0021] The user interface 23 which a user operates is formed in the front face of a user terminal 20. The user interface 23 of this example has prepared in the morning delivery facilities setting-out section 23b which indicated the time zone of delivery at night further in the afternoon re-delivery day setting-out section 23a which is a push

button-type interface and indicated the day of the week for one week on each carbon button, and on each carbon button. Therefore, a user can divide and direct the time data which wish re-delivery in a day of the week and the time zone of facilities by pushing these carbon buttons.

[0022] Delivery facilities setting-out section 23b is adjoined, and the push button switch 24 for tone signal dispatch is formed. It sends from the loudspeaker 26 which changed into a series of tone signals the delivery data set with the driver terminal 10 when this switch was pushed, and the time data set by the user, and was prepared for the side face of a user terminal. If a tone signal codes the above-mentioned information to the signal in the voice grade of a telephone (about 300Hz - 3,400Hz) and transmits it to the pin center, large terminal 30 using the telephone line, it can identify and process delivery data and time data in a pin center, large terminal side.

[0023] The memory 25 which memorizes further the data inputted from the driver terminal 10 and the data inputted from the user interface 23, the converter 27 which changes the data in this memory 25 into a tone signal, and the control section 28 which controls these are formed in the user terminal 20. Three kinds of information is memorized by the memory 25 of the user terminal 20 of this example. 1st information 25a is discernment data of a user-terminal proper, is transmitted also to a driver terminal side through the interface 22 for driver terminals, and is set to one of the delivery data. 2nd information 25b is data set up through an interface 22 from the driver terminal 10, and is data for identifying and managing re-delivered loading, such as handling-of-freight data. These 1st and 2nd information 25a and 25b is the information which setting out and modification from a user interface 23 have become impossible, and a user does not need to deal with it, and does not need to be recognized. 3rd information 25c is time data which wish the re-delivery set up by the user interface 23, and it is only this information 25c that a user deals with it.

[0024] These [ which were set as memory 25 ] three information 25a-25c will be transmitted to the pin center, large terminal 30 through the telephone line from a user terminal 20, if it is changed into a series of tone signals by the tone signal transformation section 27 and a user pushes a switch 24 by it.

[0025] Based on the flow chart of drawing 4, the outline of processing using a user terminal 20 is explained. First, in step 61, a driver pretreats a user terminal using a driver terminal. In this pretreatment, the memory of a user terminal 20 is reset except for the discernment data of a user-terminal proper in step 62. And in step 63, the information which constitutes delivery data, such as handling-of-freight data, is set as memory 25. A user terminal 20 is put on a user's \*\*\*\*\* in this condition.

[0026] A user sets up the time data which wish re-delivery using the user interface 23 of a user terminal in step 64. And data are outputted, telephoning a delivery center in step 65. If a user pushes a switch 24 in step 66, the delivery data in memory 25 and time data will be coded by the tone signal, and will be outputted from a loudspeaker 26. Since the inputted tone signal is analyzed, and it changes time data into voice data and repeats them, in step 68, it mistakes to time data, and if the pin center, large terminal 30 does not have \*\*, it will end the processing using a user terminal. Based on the message from the pin center, large terminal 30, it returns to step 64 and a tone signal is broadcast again to mistake and change \*\*\*\*\* and time data on the other hand. In the case of the time of choice which cannot be specified in the user interface 23 of a user terminal, such as wishing re-delivery on the day, or wishing re-delivery after one week or more, according to directions of the pin center, large terminal 30, the time of choice is told with voice.

[0027] Various things have a user's hope to service of re-delivery, and want of wanting you to send to the case where I want a controller and a neighbor to deposit the loading other than the above, and a station may occur. Furthermore, going to a delivery center to take oneself may be convenient. In the system of this example, such an exceptional hope can transmit now with voice, and improvement in service to various users can be aimed at.

[0028] Thus, if the user terminal 20 of this example is used, a user can push the switch of dedication in which the time prepared for the interface is shown, can telephone a delivery center, and can tell the time which wishes re-delivery only by pushing the switch which sends a tone signal. Moreover, the time connected to the delivery center with the voice which the pin center, large terminal repeated can be checked. Since the delivery data which identify and manage the loading set as the object of re-delivery are beforehand set as the user terminal 20, a user does not need to read out delivery data or it is not necessary to key, and the delivery data itself can request re-delivery, without a user being conscious.

[0029] Although the system which transmits the data of re-delivery using the tone dispatch function of push button-type telephone is also possible, in the system using the tone dispatch function of telephone, a user needs to input all data including delivery data. Furthermore, since it is not a dedicated terminal, after also changing assignment of a day of the week and a time zone into a predetermined code, it will be necessary to input. Therefore, a key input increases, time and effort is taken, and the possibility of an input error is also dramatically high and duration of a call also tends to become long. On the other hand, if it is a system using the user terminal of this example, the

actuation whose user sets up time and which is performed for accumulating only pushes two push switches, and is dramatically easy. Therefore, that an input error occurs does not have \*\*\*\*\*. The information transmitted to a pin center, large terminal from a user terminal on the other hand is the information on sufficient amount including delivery data. Thus, a safe and positive information transfer system can be built by using the user terminal of this example. Moreover, since its duration of a call is also short since these data can be transmitted in a short time, and they end, they are economical. Furthermore, since a call is completed for a short time, there is also a merit that there is little telephone line which receives the call from a user terminal, and it ends.

[0030] Moreover, by using a user terminal, the time of choice of re-delivery can be connected now to a pin center, large terminal, and a delivery center can be connected with at any time for 24 hours. Therefore, service of a re-delivery system can be received, without being influenced by the office hours of the operator of a delivery center. Moreover, also in a delivery center, an operator's laborsaving can be attained and relief of an operator's effort and reduction of costs can be realized.

[0031] Since a driver is re-delivery, when it goes to a destination, a user terminal 20 can be collected from a user and can be used any number of times. Therefore, the system of this example is a system which it is [ system ] dramatically economical and can reconcile improvement in service, and the cutback of costs also at this point.

[0032] A flow chart is used for pin center, large terminal drawing 5 and drawing 6, and the outline of processing of a pin center, large terminal is shown. Moreover, the outline of the system configuration of a pin center, large terminal is shown in drawing 9. Furthermore, the outline of the hardware configuration of a pin center, large terminal is shown in drawing 1. It can build also as an information processor of dedication and the pin center, large terminal 30 of this example can also be introduced as part of the general-purpose equipment using computers, such as a personal computer. The pin center, large terminal 30 is equipped with the interface 31 which receives delivery data from the driver terminal 10, and the interface 32 which is connected to the telephone line and accepts a tone signal from a user terminal 10. And it has further the storage section 33 which memorizes these data, the processing section 34 which performs processing of data, the console 35 for operators, the display 36 which displays data, and the printer 37 which carries out the printed output of the data. What contacts soon like a photo coupler as an interface 31 for driver terminals, and exchanges data, what exchanges data by the telephone line or wireless, the thing which exchanges data through storages, such as memory card, further, etc. are employable.

[0033] The processing section 34 of a pin center, large terminal is equipped with the reception data-processing section 41 which receives the data from a user terminal 20, and the system 42 which carries out an audio response based on these directions, and makes the reception data 43 with the data from a user terminal 20. The delivery data-processing section 45 which processes creating the data for re-delivery using this reception data 43 and the delivery data 44 received through the interface 31 for driver terminals etc. is formed, and these processing results etc. are outputted to a display 36 or a printer 37 from the data output section 46. Furthermore, the data for re-delivery are transmitted to the category into which a driver and loading keep and work [ classification ] by the redistribution directions section 47. Moreover, even if a predetermined period passes, when the tone signal from a user terminal 20 is not being received based on the processing result of the delivery data-processing section 45, a predetermined advice message can be outputted to a user by telephone from a voice recognition and response system 42 using the advice processing section 48.

[0034] Based on the flow chart shown in drawing 5, the big flow of processing of the pin center, large terminal 30 is explained. In step 71, the pin center, large terminal 30 receives the delivery data 44 from the driver terminal 10, and memorizes them in the storage section 33. Moreover, the telephone from a user terminal 20 is received in step 72, a tone signal is analyzed, and it memorizes in the storage section 33 as reception data 43. In step 73, the delivery data 44 are processed based on the reception data 43, and re-delivery data are created in step 74. Based on this re-delivery data, the directions to a driver etc. are outputted in step 75.

[0035] Furthermore, in step 76, the existence of the reception data 43 corresponding to the delivery data 44 is checked, and even if a predetermined period passes, when reception data are not obtained, advice to a user is sent in step 77. Since setting out of the period which sends expediting or advice to a user may be free, you may be from the event of setting a user terminal using a driver terminal and a pin center, large terminal receives delivery data. Or such processing may be started with the predetermined date or time of day.

[0036] In the pin center, large terminal 30 of this example, delivery data are inputted from a driver terminal, and since the time of choice of the re-delivery from a user is further transmitted in the coded format which can be processed by computer etc., various processings can be automatically performed without passing through an operator's hand. Therefore, to the user who is not limited to the above processings, for example, does not have the communication from a user terminal, after performing advice several times, it registers with an important point contact list, and service of

making a driver visit can also be realized. Moreover, it is possible to aim at improvement in service as a system which used these data also for the tracking system of the already used loading, or was unified with the tracking system. In the tracking system of common loading, whenever the receipt-of-goods number or slip number currently beforehand printed by the forwarding request cut-form which a delivery client fills in serves as a key, these are bar-code-ized, loading etc. is given and it passes through each pin center,large, it is processed as data read and online-ized. Therefore, service of answering the location or the situation of loading quickly to the inquiry from a forwarding client is offered. In such service, when a loading tracking system takes in the delivery data or reception data of an information transfer system mentioned above, offer of the substantial service that it can answer exactly till the scheduled day of re-delivery is attained. The integration with a loading tracking system may be the gestalt of sharing the handy terminal for drivers which shares the office computer or personal computer which the gestalt that both sides only share data is sufficient as, and has already built the loading tracking system as a pin center,large terminal of this example, and is used for the loading tracking system as a driver terminal of this example.

[0037] Moreover, although delivery data and reception data were created based on the data which identify loading, such as a slip number, in this example and loading is managed, of course, managing with a user's telephone number is also possible. For example, if a user's telephone number is registered in the driver terminal, expediting etc. can be served for a user using the telephone number. Moreover, it is also possible to incorporate a user's telephone number offered from a public telephone switching system, when a pin center,large terminal is called, and to process collating, management, etc. of the reception of the time of choice of re-delivery and its data by using this telephone number as a key. Thus, since it inputs to the pin center,large terminal 30 by using the system of this example in the format which delivery data and reception data can process as it is, generating of troubles, such as an input mistake, can build few reliable systems.

[0038] Based on the flow chart shown in drawing 6 , the content of the processing which receives data from a user terminal 20 is explained in more detail. In step 81, it waits for telephone connection from a user. Thank you [ "utilization ] for setting to step 82, if there is a call. This is an OOO facilities automatic reception pin center,large. Please push a loudspeaker carbon button after dial tone. The message " is outputted. Under the present circumstances, it is possible to make it also make the time which outputs beforehand guidance messages, such as operation of the user interface of a user terminal, and is expected of a user set certainly. Moreover, when it returns from the

routine of error processing mentioned later to this step 82, the message "push a loudspeaker carbon button once again" is chosen and sent.

[0039] In step 83, the tone signal from a user terminal 20 is received. When there is no tone signal, it returns to step 82 and a message is repeated until it becomes predetermined (Count n) reception standby in step 84. When reception standby is performed n times, it shifts to step 90 and the guidance message for voice sound recording is passed. When a tone signal is received, it sets to step 85, and a tone signal is collated or analyzed.

[0040] In step 85, when the information transmitted by the tone signal is not in agreement with the code of predetermined delivery data and time data, the count of an input error is counted in step 87, if it is less than m times, it will return to step 82 and a message will be passed. When the m-th more than error occurs, it shifts to step 90.

[0041] When the information transmitted by the tone signal is in agreement with a predetermined code, in step 88, the voice data corresponding to the received time data is set as a voice recognition and response system. for example, the case where the tone signal which contained coded time data which are called facilities from the user terminal on Wednesday and an afternoon on April 14 is received -- the afternoon on [ on "Wednesday, April 19 ] -- I send to you by facilities. Please hang up a telephone, if very well.

[0042] Moreover, when to deliver is wished in and after today or next week, please wait for a while as it is. It is \*\*\*\*\* about the message ".

[0043] In step 89, when detect ONFUKKU and detection of the polarity reversals of a connection electrical potential difference with the exchange or detection of BIJITON does not detect it, it shifts to step 90 and voice is recorded. When ONFUKKU is detected, receptionist processing is ended and the received data are written in a record medium or memory.

[0044] On the other hand, if off-hook \*\*\*\*\* is not carried out in predetermined time amount and step 89, it will shift to step 90 and the message "put in after dial tone if there are directions of the content to correct and an addition" will be passed. Or the case where it shifts to step 90 from error processing "the sent data were correctly unreceivable. Please give the delivery appointed day and delivery time amount of hope the talk after dial tone. The message " is passed. Next, a user's voice is recorded in step 91 and receptionist processing is ended. Termination of this receptionist processing creates and memorizes reception data including voice. A user's voice is recorded with the data used as the key of delivery data, such as a handling-of-freight number, and can perform speedy retrieval now based on this key.

[0045] It enables it to specify an exact date with little switch by specifying a day of the week in the user terminal of this example. Therefore, distinction that day or one week after and a date one weeks or more after cannot be specified from a user terminal. Although it is dramatically rare that re-delivery is required at that day, and to specify a delivery day one weeks or more later, it is desirable that such a case can be coped with. Furthermore, there are not few users who require of the side which delivers exceptional conditions which were described previously. Therefore, a user enables it, as for the pin center, large terminal of this example, to specify the time of choice also in such a special case in voice or conversation. Thus, the system of this example can also take a flexible response by enabling it to also receive directions with the voice from a user while automating the processing within a pin center, large terminal by coding and transmitting time data. For this reason, a user feels easy always, can tell redistribution time to a delivery center, unless a delivery center side is also a very special case, saves an operator's time and effort and can respond redistribution time at the pin center, large terminal of this example.

[0046] The example of the re-delivery directions vote which showed the example of the reception data 43 received to drawing 10 , and was outputted to drawing 11 based on this data is shown. The reception data 43 of this example are further equipped with 43g of existence of voice data 43d of reception days and day 43wishing delivery e which received handling-of-freight number 43a, driver number 43b, user-terminal identification number 43c, and the data from a user terminal, and 43f of facilities wishing delivery. Among these, handling-of-freight number 43a, driver number 43b, and the user-terminal identification number 43 are data contained also in the delivery data 44 inputted from the driver terminal 10, and can identify the loading which should be re-delivered to a user by these. Moreover, although handling-of-freight number 43a, driver number 43b, and the user-terminal identification number 43 are data transmitted from the user terminal 20, since it is set up with the driver terminal 10, a user needs to involve.

[0047] Time data of day 43wishing delivery e and 43f of facilities wishing delivery are data which the user set as the user terminal 20, and can decide on the time re-delivered by this.

[0048] Furthermore, there is data 43g which shows audio existence, for example, the 2nd data show that voice is recorded. Therefore, according to the time or the special conditions for which a user wishes, re-delivery can be performed by reproducing the recorded voice. Removing the case where it is special in this way, with the system of this example, the intervention of an operator is unnecessary and creation of the information



for re-delivery or subsequent processing is automatically performed in the usual case.

[0049] From the pin center, large terminal 30, as shown in drawing 11, assignment re-delivery day 45a directed by the user terminal 20 is indicated, and the re-delivery directions vote 45 is outputted by one-article one leaf. Furthermore, when there are special directions with voice, special instructions column 45b is outputted, and the data from the voice recorded here let an operator pass, or are indicated in the form of the output from a voice recognition system. Based on this re-delivery directions vote 45 of a driver, it visits a destination again, and loading is delivered.

[0050] As explained above, it is possible to use the information transfer system concerning this invention for the re-delivery system of delivery, and the communication about the re-delivery which becomes 1000 or more affairs from 100 numbers per day by this when many can be processed automatically, without through an operator. Furthermore, since the reception organization of 24 hours can be taken, the time of delivering [ which he wishes even if an operator is the night and the holiday which are not present in a delivery center ] can be transmitted and checked. Moreover, the processing which a user performs to eye others is dramatically easy, and can be easily given to anyone regardless of age or sex. furthermore -- since it is the format which the data from a user terminal are coded and can be processed as it is at a pin center, large terminal -- mistaking -- they are few reliable systems. And since outputs, such as classification for every delivery center and instructions to a driver, can also be performed automatically, is very utilization effectiveness \*\*?

[0051] In addition, the class of information included in the delivery data explained above etc. is an example, and is not limited to this. Moreover, of course, modification of specifying a calender day instead of a day of the week in a user terminal is possible. Furthermore, the function of a driver terminal and a pin center, large terminal is not limited to the function explained above, it is also possible to give the same function using a general-purpose terminal, and a configuration is not limited above, either. Also in a user terminal, even if it adds the cancellation function of the information which sent by the tone signal etc., it is easy to be natural. Moreover, the configuration of a driver terminal and a user terminal is an example, and is not limited to this example.

[0052]

[Effect of the Invention] It enables it to send information, such as time which wishes re-delivery using the user terminal of the dedication which can be collected and delivered by the delivery member, to a pin center, large terminal through the telephone line in the information transfer system using the telephone line of this invention, as explained above. This user terminal is a communication terminal which can be used

easily [ anyone ], the information which identifies loading with a driver terminal is inputted, and a user should just set up time. Next, a telephone is connected with a delivery center, and if the directions changed into a tone signal are performed, the 2nd information on the time data which the 1st information, such as a handling-of-freight number set up with the driver terminal, and a user set up will serve as a series of tone signals, and it will be inputted into a pin center,large terminal.

[0053] Therefore, the actuation of a user terminal which a user performs is dramatically easy, and can be used regardless of age or sex, and since there is still less generating of an error, the information on directing re-delivery certainly etc. can be sent to a pin center,large terminal. Since the information sent to the pin center,large terminal is a tone signal and is coded, in a terminal, it can process as it is, and troubles, such as an input mistake, can be prevented also here. Furthermore, at a pin center,large terminal, since the response of a user is possible, relief of an operator's effort and reduction of the costs concerning this can be aimed at, and it is a reliable system.

[0054] As explained based on the above and an example, by using the information transfer system concerning this invention, actuation of a user is easy, it is reliable, and the system which is compatible in improvement in service and reduction of cost can be built further.

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[Translation done.]

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1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.\*\*\*\* shows the word which can not be translated.

3.In the drawings, any words are not translated.

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CLAIMS

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[Claim(s)]

[Claim 1] The driver terminal with which a delivery member performs input/output operation, and the user terminal into which it is collected and delivered by said delivery member and the 1st information is inputted by said driver terminal, It has the pin center,large terminal which receives the data from said driver terminal and a user terminal, respectively. Said user terminal The step which sets up the 2nd information by the user, and the step which will change said 1st and 2nd information into a series of tone signals if there are directions of said user, It has the step which outputs this tone signal. Said pin center,large terminal The 1st step which receives said tone signal from said user terminal through the telephone line, The 2nd step which changes said 2nd information on said received tone signal into voice, and is outputted through said telephone line, The information transfer system using the telephone line characterized by having the 3rd step which combines the data from said driver terminal, and the data from said user terminal based on said 1st information transmitted by said tone signal, and creates the 3rd information.

[Claim 2] It is an information transfer system using the telephone line characterized by having the step which memorizes the voice of said user by whom said pin center,large terminal was transmitted through said telephone line in claim 1 following said 2nd step after predetermined time amount progress.

[Claim 3] It is an information transfer system using the telephone line characterized by sending a predetermined message to said user through said telephone line when having not accepted said tone signal equipped with said 1st information by which said pin center,large terminal was further included in data from said driver terminal in claim 1 from said user terminal within the predetermined period.

[Claim 4] It is an information transfer system using the telephone line characterized by equipping said 1st information with the identifiable code for the loading to which

delivery was entrusted in claim 1, and equipping said 2nd information with an identifiable code for the time which wishes re-delivery of said loading.

[Claim 5] The interface for driver terminals which is said user terminal according to claim 1, and receives said 1st information from said driver terminal, The user interface to which said user can set said 2nd information, The memory which memorizes said 1st and 2nd information, and the tone signal transformation section which changes said 1st and 2nd information into a tone signal, The user terminal characterized by having the dispatch section which sends said tone signal, and the control section which controls said interface for driver terminals, a user interface, memory, the tone signal transformation section, and the dispatch section.

[Claim 6] It is the user terminal characterized by having equipped said 1st information with the identifiable code for the loading to which delivery was entrusted in claim 5, and equipping said 2nd information with the identifiable code for the time which wishes re-delivery of said loading, and equipping said user interface with the part which specifies said time by the day of the week, and the part which specifies said time by the time zone.

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[Translation done.]